

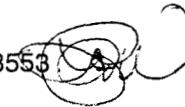


000063356

INTEROFFICE CORRESPONDENCE

DATE: June 12, 1995

TO: W. L. Bartholomew, Procurement, Bldg. 080, X8512

FROM: L. J. Peterson-Wright, Operable Unit 7 Project, Bldg. 080, X8553 

SUBJECT: MODIFIED LEACHATE ACCELERATED ACTION, ADDENDUM 1, REVISION 5,
STATEMENT OF WORK FOR OPERABLE UNIT (OU) SEVEN, MTS-3553017TB -
LJPW-017-95

Action: Initiate Change Order.

Attached please find Addendum 1, Revision 5 of the Statement of Work (SOW) for Operable Unit (OU) Seven under S. M. Stoller contract MTS 3553017TB, and a purchase requisition.

Addendum 1, Revision 5 to the SOW has two associated enforceable milestones. "Submit modified Proposed Action Memorandum to CDPHE/EPA" is June 15, 1995, and "Begin Seep Collection" is August 16, 1995. In order to meet these IAG milestones, Operable Unit Seven requires the immediate implementation of the modified work scope.

S. M. Stoller designed the original active leachate collection and treatment system. S. M. Stoller can retain many facets of the previous design to produce a design for a passive leachate collection and treatment system in a cost-effective and timely manner.

If you have any questions, please contact me at extension X8553.

LJP-W:cb

Attachments:
As Stated (2)

cc:
T. M. Lindsay
P. J. Martin
E. C. Mast
D. Steffan
ERPD Project File (2)

ADMIN RECORD


STATEMENT OF WORK FOR
OPERABLE UNIT 7
PRESENT LANDFILL (IHSS 114)
AND
INACTIVE HAZARDOUS WASTE STORAGE AREA (IHSS 203)

PREPARED BY
EG&G ROCKY FLATS INC.
ENVIRONMENTAL RESTORATION MANAGEMENT
JUNE 1995

REVISION 5

Program Manager

Date


6/12/95

Quality Assurance Review

Date


6/12/95

1.0 OBJECTIVE

The objective of this statement of work (SOW) is to integrate existing activities for Operable Unit 7 (OU 7), Present Landfill with revised scope resulting from current negotiations between DOE-RFFO, the Colorado Department of Public Health and Environment (CDPHE) and the Environmental Protection Agency, Region VIII (EPA). Work conducted under this SOW supports EG&G Rocky Flats' efforts to implement the Rocky Flats Environmental Technology Site (RFETS) Interagency Agreement (IAG).

2.0 SCOPE

The scope of this addendum is to identify and implement revised scope for Operable Unit 7 (OU 7), Present Landfill. The tasks detailed below have been identified as a result of new guidance from the agencies and DOE stemming from direct negotiations for this OU. This effort involves the modification of the Phase I RFI/RI Field Sampling Plan, implementation of the revised field sampling plan, development of the Landfill Interim Measure/Interim Remedial Action (IM/IRA) Decision Document with remedial design and the development of the Leachate Collection IM/IRA with remedial design. These modifications are a result of an integration of Phase I and Phase II pathways identified in the conceptual model detailed in Technical Memorandum 1, Exposure Scenarios for OU 7 and current re-scoping activities being conducted with the agencies. New tasks include modification and implementation of pertinent sections of the Phase I RFI/RI Work Plan as well as Landfill and Leachate IM/IRA development and design. All tasks have been discussed with DOE/RFO as well as the technical oversight representatives from the Agencies. Tasks originally supporting the development of a Phase I RFI/RI Report will now support the development of an Interim Measure/Interim Remedial Action Decision Document (IM/IRA/DD).

3.0 APPLICABLE DOCUMENT GUIDANCE

The subcontractor shall utilize, but not be limited to, the following regulatory documents and any references (latest editions) cited therein while implementing this SOW :

Rocky Flats Interagency Agreement, January 22, 1991

EG&G, Rocky Flats, Inc., Final Phase I RFI/RI Work Plan for OU 7, Present Landfill, December, 1992

EG&G, Rocky Flats, Inc., Proposed Interim Measure/Interim Remedial Action Decision Document for the Solar Evaporator Ponds Operating Unit No. 4., April 1992

EG&G, Rocky Flats, Inc., Annual Report: Treatability Studies, March 1992

EG&G, Rocky Flats, Inc., Historical Release Report for the Rocky Flats Plant, June 1992

EG&G, Rocky Flats, Inc., Background Geochemical Characterization Report, September 1993

US EPA, Guidance for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, Interim Final, EPA 540 G-89-004, October 1988

US EPA, Data Quality Objectives for Remedial Response Activities, Development Process, March 1987

US EPA, Data Quality Objectives for Remedial Response Activities, Example Scenario, March 1987

US EPA, Guidance for Data Usability in Risk Assessment, October 1990 (or latest edition)

US EPA, Risk Assessment Guidance for Superfund, Volume I, Human Health Evaluation Manual, (Part A), Interim Final, EPA 540/1-89/002, December 1989

US EPA, Risk Assessment Guidance for Superfund, Volume II, Environmental Evaluation Manual, Interim Final, EPA/540/1-89/001, March 1989

US EPA, Ecological Assessments of Hazardous Waste Sites: A field and Laboratory Reference, EPA/600/3-89/013, March 1989

US EPA, Guideline for Conducting Remedial Investigations and Feasibility Studies Under CERCLA, EPA/540/2-058, December 1989

Code of Federal Regulations, Title 10 Part 1022 - Compliance with Floodplain/wetlands Environmental Review Requirements

Code of Federal Regulations, Title 40, Part 265 - Interim Status Standard for Owners and Operators of Hazardous Waste Treatment, Storage and Disposal Facilities, July 1990

Code of Federal Regulations, Title 43, Part 11 - Natural Resource Damage Assessments, October 1987 (or latest edition)

Code of Federal Regulations, Title 40, Part 61.151 to 154 - Standard for Inactive Waste Disposal Sites for Asbestos Mills and Manufacturing and Fabricating Operations

Phase I RFI/RI Work Plan For Operable Unit 7 Present Landfill IHSS 114 and Inactive Hazardous Waste Storage Area IHSS 203, September 1992 (Including Draft Technical Memoranda for OU 7)

4.0 TASKS

Task 4.1 Finalize OU 7 Phase I RFI/RI Work Plan Modification

The subcontractor shall finalize this technical memorandum per DOE HQ and DOE-RFO as well as EPA/CDPHE comments on the draft The Phase I RFI/RI Work Plan which was modified to reflect the following:

- Changes to Section 7, Field Sampling Plan (FSP), to reflect additional field activities necessary to support agency approved revised Data Quality Objectives (DQOs).
- Changes to the DQO section of the work plan as modified as a result of Task 4.1.
- Modifications to any other section of the work plan such as QA/QC, PARCC, HHRA, EE as necessary to support the revised DQOs.
- Data evaluation of Phase I RFI/RI data to support the proposed scope of the Technical Memorandum.

The format of this revision shall be via technical memorandum and as such will require at least two review and revision cycles as well as agency and DOE briefing meetings. The final proposed scope shall be developed per guidance from negotiations between EG&G and DOE and the regulatory agencies, be reviewed by EG&G and DOE technical staff, and approved by the EG&G project manager and all IAG signatories.

Task 4.2 Revised Field Sampling Plan Implementation

Upon approval by DOE, CDPHE, and EPA of the revised field sampling plan, the field operations shall be implemented to achieve the agency approved DQOs. Operations shall be conducted in accordance with applicable EG&G Standard Operating Procedures (SOPs) including but not limited to all ER field, quality, and administrative SOPs. For the purpose of this request for proposal, all field cost and resource estimates shall be broken down into the following major categories:

- Drilling, including monitor well installation and soil borings
- Soil sampling
- Other sampling/monitoring activities
- Health and Safety Support
- Field Management

The subcontractor shall perform the RFI/RI Investigation field work in accordance with the Work Plan Implementation Plan, the Revised Field Sampling Plan, pertinent sections from the Original Work Plan, the IAG, this SOW, and supporting procedures.

The subcontractor will maintain a daily field logbook of ongoing work activities. Logbook will be transferred to EG&G at termination of contract as a Quality Assurance Record.

All schedules, cost breakdowns, and task reports shall be developed on a task by task basis. The attached work breakdown structure provides guidance as to how the baseline schedule and costs shall be detailed for any proposal, status reports, and other documentation associated with this project.

Task 4.3 Baseline Risk Assessment

A baseline risk assessment is no longer required due to the adoption of the presumptive remedy for municipal landfill closure. Instead a post-closure risk assessment will be required. This post closure risk assessment is composed of a Human Health Risk Assessment and an Ecological Evaluation.

4.3.1 Human Health Risk Assessment

The HHRA cannot be completed until post closure.

4.3.2 Environmental Evaluation (EE)

An environmental evaluation will be completed for this project. This EE was funded in FY 93 and was incorporated with OU 6. The Environmental Evaluation is included as a subtask under the Baseline Risk Assessment in EG&G's estimate. Stoller has broken down the Environmental Evaluation as a separate task in the cost proposal submitted to EG&G.

Task 4.4 Project Management

The subcontractor shall be responsible for all aspects of project management and control for subcontractor personnel. Reporting requirements delineated in this document shall be the basis for project control of cost and schedule. Budget status reports shall be completed monthly by the subcontractor and submitted to CTR by the fifteenth day of each month for the proceeding month's activity. This report shall include earned value statements that will detail the following:

- Budgeted Cost of Work Performed (BCWP)
- Actual Cost of Work Performed (ACWP)
- Budgeted Cost of Work Scheduled (BCWS)

All tasks shall be reported monthly in terms of earned value as required in the original scope of work. New tasks shall be included in a revised work breakdown structure for this subcontract and submitted to the EG&G project manager for review and approval. All costs and reporting shall be done in accordance with the format in Attachment 1. Earned value shall be calculated

and reported monthly for every task. These calculations shall be performed at the task level and rolled up to the project level.

The subcontractor shall also be responsible for attending performance meetings with EG&G project team members and/or regulatory agency personnel. Meetings include but may not be limited to weekly meetings with EG&G project management and bi-monthly meetings with EG&G, DOE, and regulatory agency personnel. Typical meetings should not exceed 4 hours in length but may run longer.

The subcontractor shall be responsible for participating in meetings concerning logistical coordination. The subcontractor shall prepare meeting minutes to document all meetings with EG&G project team members and regulatory agency personnel. The typed meeting minutes are due to the CTR within one week of the meeting date. Meeting minutes shall be reviewed and approved by the CTR prior to submission to the project file. The meeting minutes shall be typed in Word Perfect for the Macintosh. An electronic copy (3 1/2 " disk) of meeting minutes shall be submitted to the CTR monthly. Project management meetings other than these detailed may be required. Meetings and attendees shall be approved by the CTR.

The Health and Safety Plan Addendum and the WPIP will be updated as required.

The subcontractor shall be responsible for preparing a comment responsiveness summary for the Addendum to the Site-Specific Health and Safety Plan. After approval of the comment Responsiveness Summary, the subcontractor shall finalize the Site-Specific Health and Safety Plan Addendum.

Task 4.5 Miscellaneous Tasks

4.5.1 Field Deficiency Resolution

The subcontractor's participation in field management review meetings shall include preparing written responses/corrections of field work deficiencies as determined by regulatory agencies and EG&G and DOE QA/QC audit findings or deficiencies. A schedule for resolving field deficiencies during all aspects of the field programs will be decided upon with the subcontractor immediately following the recognition of the deficiency.

4.5.2 Data Management & Quality

The subcontractor shall attend a briefing to be given by EG&G's Sample Management Organization before sampling activities begin and a briefing before data use and extraction. In accordance with Section 19 of the QAPjP manual, all software used for data management and report generation must be approved by the Sample Management Organization prior to use.

4.5.3 Data Compatibility

The subcontractor shall provide mapping capabilities and/or support to utilize ESRI's ARC/INFO Geographic Information Systems (GIS) software to manage all spatially referenced data. Initial Rocky Flats Plant base coverage will be supplied to the subcontractor by EG&G. The subcontractor shall also provide technical experience in using the ARC/INFO software for map generation and spatial modeling and exchange digital data with EG&G as defined:

1. All spatial data will have an XY coordinate projection of True State Plane in the Colorado, Central zone with the NAD27 datum.
2. Format of data will be an ARC/Info export file for a UNIX operating system.

The subcontractor shall demonstrate proficiency in the management of sample gathering and data transmission, especially in the areas of accurate utilization and timely transmission of DataCap records to the Rocky Flats Environmental Database System (RFEDS).

4.5.4 Environmental Quality Assurance Briefing

All subcontractor personnel working on tasks described in this SOW shall attend a Quality Assurance briefing to be given by EG&G's Environmental Quality Support department.

4.5.5 Interim Measure/Interim Remedial Action (IM/IRA) Process

The following is a general description of the work required for the IM/IRA process. It is intended for informational purposes. Detailed task descriptions follow.

- 1) Regulatory Support;
- 2) Applicable Relevant and Appropriate Requirements (ARARs) Development;
- 3) Modeling Support;
- 4) Conceptual Design;
- 5) Data Evaluation (RFI/RI, Historical, OU-6 etc.);
- 6) IM Environmental Assessment (Draft and Final Reports);
- 7) Options Analysis - Sludge Remediation;
- 8) Draft IM/IRA Decision Document
- 9) IM/IRA Decision Document Public Comment Responsiveness Summary;
- 10) Final IM/IRA Decision Document
- 11) IM/IRA Work Plan
- 12) Phase I IM/IRA Implementation Document (Title II);
- 13) Final Title II Design with Construction Schedule;

The subcontractor shall be required to support the IM/IRA Program as referenced. The overall objective of this scope of work shall be to close OU 7 in accordance with the IAG/Colorado

Hazardous Waste Act regulations as supported by EPA guidance on "Presumptive Remedies".

Task 4.6 Leachate Collection Action Memorandum

The subcontractor shall prepare an Action Memorandum in accordance with the DOE decision on Pond Water IM/IRA (Attachment 2). The schedule should also follow with the attached proposed schedule(Attachment 3). This document shall take into consideration the impact to wetlands as part of the NEPA integration and should assume only partial drainage of the pond prior to installation of the leachate collection system if necessary.

The scope of the leachate collection system is limited only to the surface and subsurface leachate emanating from the Present Landfill. The system will support final closure.

The draft Leachate Collection IM/IRA shall address all hazardous substance source areas with risk levels greater than $10E-6$ evaluated at the source. The proposed Leachate IM/IRA Document shall be a concise document that: (1) indicates the objectives of the IM/IRA (Collection and treatment of landfill leachate); (2) discusses alternatives that were considered; (3) provides the rationale for the options analysis including NEPA values; (4) presents EPA/CDPHE approved Applicable, Relevant and Appropriate Requirements (ARAR) and; (5) present the conceptual design.

The subcontractor shall be required to incorporate all EG&G, DOE, EPA, and CDPHE comments into a final proposed Leachate Collection Action Memorandum and generate a comment responsiveness summary.

4.6.1 Regulatory Support

The subcontractor shall be required to provide regulatory support relative to the IM/IRA process. An emphasis shall be placed on DOE Orders with consideration given to integration of this IM/IRA process with that of the OU 7 closure IM/IRA. The subcontractor shall be consistent with the regulations enforced within the OU 7 including: RCRA, CERCLA, Land Disposal Regulations(LDRs) and CHWA. Regulatory analysis shall be required for all options evaluated.

4.6.2 Action Specific Applicable Relevant and Appropriate Requirements (ARARs) Development

The subcontractor shall be required to prepare an EPA approved ARAR analysis in support of the Leachate Collection Action Memorandum in accordance with the IAG. The ARARs developed shall augment the agency approved location and chemical specific ARARs and shall also require agency approval. ARARs are currently being developed under task 4.7.2. This scope shall be limited to responses specific to task 4.6

4.6.3 Modeling Support

The subcontractor shall be required to provide, as appropriate, numerical or analytical modeling support. Hydrogeologic modeling may be necessary to evaluate the extent of contamination of leachate and effectiveness of leachate collection system.

4.6.4 Conceptual Design

The subcontractor shall be required to prepare a conceptual design in support of the preferred alternative selected in the Leachate Collection Action Memorandum. The conceptual design shall be sufficient for supporting the Title II Design.

4.6.5 Data Evaluation

The subcontractor shall be required to evaluate all historical and Phase I data for OU 7, new data collected, and any other existing data applicable to supporting the IM/IRA process. At a minimum, the subcontractor shall be required to utilize the OU 7 Phase I RFI/RI, historical, pond characterization, or other previous investigations data to evaluate/select a remedial technology for collection and treatment of the landfill leachate.

4.6.6 Environmental Assessment (EA)

The subcontractor shall perform a National Environmental Policy Act (NEPA), Environmental Assessment (EA) that shall be integrated into the Landfill Leachate Collection IM/IRA Decision Document. Guidance for performing the integration shall be taken from the recent DOE-HQ policy.

4.6.7 Options Analysis

The subcontractor shall be required to support an "Options Analysis" for leachate collection and treatment. The options analysis shall take all potentially appropriate remedial alternatives into consideration. The options analysis shall support the Leachate Collection Action Memorandum, as appropriate.

4.6.8 Prepare Draft Leachate Collection Action Memorandum

The subcontractor shall integrate the applicable sections into an Action Memorandum in accordance with the IAG. This section shall include a Title II design for collection and treatment of landfill leachate. Draft final and final versions will be required.

4.6.9 Public Comment Period Responsiveness Summary

Subsequent to the Leachate Collection Action Memorandum being revised in accordance with the above referenced agencies comments, the CDPHE/EPA shall open a public comment period for the proposed Leachate Collection Action Memorandum to satisfy the required public comment period of 30 days.

Concurrent with the public comment period as comments are received for the Leachate Collection Action Memorandum, the subcontractor shall develop a Comment Responsiveness Summary in accordance with the IAG and EG&G, DOE, EPA, and CDPHE. After receipt of the public comments concerning the proposed Leachate Collection Action Memorandum, the subcontractor shall submit a Final Leachate Collection Action Memorandum and Responsiveness Summary for EG&G, DOE, EPA and CDPHE review and approval in accordance with paragraph 150 of the IAG.

The subcontractor shall be required to support the public comment period associated with the Leachate Collection Action Memorandum. This shall include, but may not be limited to, development of slides/overheads, attending public meetings and addressing questions, preparing narrative description of the selected remedy, etc. In addition, the subcontractor shall be required to prepare a "Leachate Collection Action Memorandum Public Responsiveness Summary" in accordance with the RFETS IAG. The responsiveness summary shall become an integrated component of the Leachate Collection Action Memorandum. Draft and final versions will be required.

4.6.10 IM/IRA Decision Document Comment Resolution/Revision

The subcontractor shall be required to revise the Leachate Collection Action Memorandum in accordance with the comments submitted from EG&G, DOE, EPA, CDPHE and public comments for incorporation into the Leachate Collection Action Memorandum.

4.6.11 Development of IM/IRA Decision Document

Further development and necessary revisions of the Leachate Collection Action Memorandum shall be required by the subcontractor in accordance with previous comments and revisions. This task will develop the final Leachate Collection Action Memorandum for submittal to EG&G.

Task 4.7 IM/IRA Decision Document for Landfill Closure

The subcontractor shall prepare an Interim Measure/Interim Remedial Action (IM/IRA) Decision Document in accordance with the terms and conditions of the Rocky Flats Environmental Technology Site (RFETS) Interagency Agreement (IAG) signed by the U.S. Department of Energy (DOE), U.S. Environmental Protection Agency (EPA), and the Colorado Department of Public Health and Environment (CDPHE) on January 22, 1991. The draft proposed Phase I IM/IRA Decision Document shall be prepared in accordance with paragraphs 15 and 150 of the RFETS IAG, and consistent with guidance for implementing interim actions under remedial authority provided in the preamble to the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) 55 CFR 8704, March 8, 1990 and the Colorado Hazardous Waste Act (CHWA) Closure requirements. The draft proposed Phase I IM/IRA Decision Document shall provide the information required to recommend an alternative consistent with

the CDPHE closure regulations.

A presumptive remedy strategy for streamlined site characterization and remediation has been adopted for the Present Landfill at OU 7 by DOE, CDPHE, and EPA. Source containment is the presumptive remedy for municipal landfills and consists of the following elements; landfill cap, institutional controls, gas collection and treatment, leachate collection and treatment, and source area groundwater control. The leachate collection and treatment component of the presumptive remedy is addressed under Task 4.6 All other components are addressed under this task.

The draft Phase I IM/IRA Decision Document shall address all hazardous substance source areas with risk levels greater than $10E-6$ evaluated at the source. The IM/IRA DD and/or OU 7 Baseline Risk Assessment (BRA) shall define the source areas exhibiting a risk level of $10E-6$. The proposed IM/IRA Decision Document shall be a concise document that: (1) indicates the objectives of the IM/IRA; (2) discusses alternatives, if any, that were considered; (3) provides the rationale for the alternative selected; (4) presents EPA/CDPHE approved Applicable, Relevant and Appropriate Requirements (ARARs) and; (5) discusses how the interim remedy selected will be consistent with the final remedy.

The subcontractor shall be required to incorporate all EG&G, DOE, EPA, and CDPHE comments into the draft final proposed IM/IRA Decision Document and generate a comment responsiveness summary.

4.7.1 Regulatory Support

The subcontractor shall be required to provide regulatory support relative to the IM/IRA process. In general, an emphasis shall be placed on RCRA, CERCLA, Land Disposal Regulations (LDRs), CHWA and DOE Orders. Regulatory analysis shall be required for all options evaluated.

4.7.2 Action Specific Applicable Relevant and Appropriate Requirements (ARARs) Development

The subcontractor shall be required to prepare an EPA approved ARAR analysis in support of the IM/IRA Decision Document in accordance with the IAG. The ARARs developed shall augment the agency approved location and chemical specific ARARs and shall also require agency approval.

4.7.3 Modeling Support

The subcontractor shall be required to provide, as appropriate numerical or analytical modeling support. For example, in the event a migration barrier is selected for the preferred alternative, the subcontractor shall be required to apply the EPA approved, "Hydrologic Evaluation Landfill Performance" (HELP) model, or a comparable/equivalent model.

4.7.4 Conceptual Design

The subcontractor shall be required to prepare a conceptual design in support of the preferred alternative selected in the IM/IRA Decision Document. The conceptual design shall be sufficient for supporting the Title I Design.

4.7.5 Data Evaluation

The subcontractor shall be required to evaluate all historical and Phase I data for OU 7, new data collected, and any other existing data applicable to supporting the IM/IRA process. At a minimum, the subcontractor shall be required to utilize the OU 7 Phase I RFI/RI, historical, pond characterization, and relevant OU 6 data or other previous investigations data to evaluate/select a remedial technology for closure of the Present Landfill.

4.7.6 Environmental Assessment (EA)

The subcontractor shall perform a National Environmental Policy Act (NEPA), Environmental Assessment (EA) that shall be integrated into the IM/IRA Decision Document following the recent DOE-HQ guidance.

4.7.7 Options Analysis

The subcontractor shall be required to support an "Options Analysis" for landfill and pond closure. The options analysis shall take all potentially appropriate remedial alternatives into consideration. The options analysis shall support the IM/IRA Decision Document, as appropriate. Options analysis shall take into account CHWA closure requirements and EPA guidance on "presumptive remedies".

4.7.8 Prepare Draft IM/IRA Decision Document

The subcontractor shall integrate the above sections into a draft IM/IRA Decision Document in accordance with Section I.B.10 of Attachment 2 of the IAG. This document shall incorporate all new guidance approved by EPA/CDPHE/DOE/EG&G as a result of re-scoping negotiations. This

section shall include a conceptual design (Title I) for closure of OU 7. Draft and final versions will be required.

4.7.9 Public Comment Period Responsiveness Summary

Subsequent to the IM/IRA Decision Document being revised in accordance with the above referenced agencies comments, the CDPHE/EPA shall open a public comment period for the proposed IM/IRA Decision Document to satisfy the required public comment period of 60 days.

Subsequent to the public comment period for the IM/IRA Decision Document, the subcontractor shall develop a IM/IRA Responsiveness Summary in accordance with the RFETS IAG and EG&G, DOE, EPA, and CDPHE. After receipt of EG&G, DOE, EPA, CDPHE and the publics comment concerning the proposed IM/IRA Decision Document, the subcontractor shall submit a Final IM/IRA Decision Document and Responsiveness Summary for EG&G, DOE, EPA and CDPHE review and approval in accordance with paragraph 150 of the RFETS IAG.

The subcontractor shall be required to support the public comment period associated with the IM/IRA Decision Document. This shall include, but may not be limited to, development of slides/overheads, attending public meetings and addressing questions, preparing narrative description of the selected remedy, etc. In addition, the subcontractor shall be required to prepare a "IM/IRA Decision Document Public Responsiveness Summary" in accordance with the RFETS IAG. The responsiveness summary shall become an integrated component of the IM/IRA Decision Document. Draft and final versions will be required.

4.7.10 IM/IRA Decision Document Comment Resolution/Revision

The subcontractor shall be required to revise the IM/IRA Decision Document in accordance with the comments submitted from EG&G, DOE, EPA, CDPHE and public comments for incorporation into the IM/IRA decision document.

4.7.11 Development of IM/IRA Decision Document

Further development and necessary revisions of the IM/IRA Decision Document shall be required by the subcontractor in accordance with previous comments and revisions. This task will develop the final IM/IRA decision document for submittal to EG&G.

Task 4.8 IM/IRA Remedial Design

The subcontractor shall be required to prepare an IM Implementation Document in accordance with the RFETS IAG. In general, the IM Design Work Plan shall consist of "Title I Design" with Title II schedule. The IM Design Work Plan shall be developed based on the conceptual design criteria from the OU 7 IM/IRA Decision Document. The IM Design Work Plan shall be developed in accordance with Section I.B.10 of Attachment 2 to the IAG.

4.8.1 IM/IRA Design Work Plan

The subcontractor shall prepare an IM/IRA Design Work Plan which shall include Title II design schedules. The work plan shall be similar in nature to the Phase I RFI/RI Work Plan Implementation Plan and shall detail implementation of the selected IM/IRA.

4.8.2 Phase I IM/IRA Implementation Document (Title II Design)

The subcontractor shall be required to develop a Phase I IM/IRA Implementation Document (Title II) in accordance with the RFETS IAG. The Phase I IM/IRA Implementation Document/Title II Design shall reflect appropriate percent complete (85% - 95%). The Title II Design Document shall be prepared by a registered engineer. Draft and final versions will be required.

4.8.3 Final Title II Design with Construction Schedule

The subcontractor shall be required to revise the Phase I IM/IRA Implementation Document/Title II Design in accordance with EG&G, DOE, and EPA/CDPHE comments and prepare a construction schedule. This document shall be prepared in accordance with the RFETS IAG. The Final Title II Design Document shall reflect appropriate percent completion (95%). The construction schedule shall be developed in accordance with the IAG schedule. Draft and final versions will be required.

5.0 DELIVERABLES

All deliverables shall be submitted with 20 copies unless otherwise specified. All deliverables shall be submitted in accordance with Table 6 of the IAG, if applicable. In order to complete DOE/EG&G internal review all draft documents shall be submitted 60 days prior to Table 6 requirements for the following:

Add deliverables:

- Landfill Closure IM/IRA Proposed Decision Document (Draft and Final)
- IM/IRA Comment Responsiveness Summary (Draft and Final)
- Title II Design (Draft and Final)

Also included are those documents which fall under Task 4.6 Leachate Collection IM/IRA:

- Leachate Collection Action Memorandum (Draft and Final)
- Leachate Collection Comment Responsiveness Summary (Draft and Final)

Additional documents required which fall under task 4.1 Work Plan Modification are:

- Final Agency approved Technical Memorandum, Revised Field Sampling Plan for OU 7, Present Landfill
- Technical Memorandum Comment Responsiveness Summary (Draft and Final)

In order to comply with the DOE DEAR Regulation 970.5204-19, document copies submitted to EG&G should not exceed 25,000 pages per deliverable. Should this exceed the 25,000 page limit, this will be considered an unallowable cost and will not be performed by the subcontractor.

For Task 4.1-Finalize OU 7 Phase I RFI/RI Work Plan, 7 copies of the draft and 1 copy of the final should be submitted to the Contract Technical Representative (CTR) for printing by EG&G and so that the 25,000 page limit is not exceeded. The remainder of the copies necessary will be printed by EG&G.

Assume all Table 6 documents shall undergo one DOE/EG&G review and two CDPHE/EPA reviews. Responsiveness summaries for all comments shall be submitted to EG&G 15 working days after receipt of comments. Responsiveness summaries shall be submitted in lieu of revised drafts to DOE and CDPHE/EPA.

6.0 QUALITY ASSURANCE REQUIREMENTS

Work performed under this Statement of Work (SOW) is governed by the Rocky Flats Environmental Technology Site (Site), Environmental Restoration Program Division (ERPD) Quality Assurance Project Plan (QAPjP) and the Quality Assurance Program Description (QAPD). The Subcontractor shall perform all work in accordance with the Site Quality Assurance program requirements. All work shall be performed under the cognizance of the responsible Site organization and in accordance with approved Site implementing procedures, or supplier procedures which have been approved by the responsible Site organization prior to the start of any work.

The Subcontractor shall comply with the following specific Quality Assurance (QA) requirements prior to the initiation of work, as appropriate.

6.1 Organization

The authority and responsibilities of persons or organizations performing work under this SOW shall be established, documented and submitted to the Site Contract Technical Representative (CTR). An organization chart identifying specific individuals by name, supported by itemized authorities and responsibilities is a suitable means of documentation.

6.2 Personnel Qualification

Personnel performing technical work shall receive training and indoctrination in accordance with 3-21000-ADM-2.02, Personnel Qualification, to applicable procedures to assure proper understanding of the QA and technical requirements of this SOW before beginning work. In addition, written personnel qualification requirements shall be established for all positions performing technical work and provided to the CTR.

6.3 Training

Documented evidence of personnel training, training material content, shall be maintained and made available to the CTR. The Site will provide training for Quality Assurance and technical procedures furnished by the Site. All Subcontractor personnel shall attend additional required job -specific and plantsite -specific training applicable to their job responsibilities. A list of Subcontractor personnel names, titles and current training shall be provided to the CTR.

6.4 Design and Control of Scientific Investigations and Engineered Processes

All processes shall be performed to Site ERPD approved and controlled procedures or work plans except where excluded in writing by the Contractor. Examples of scientific/engineering processes include calculations, technical design, physical sampling handling/shipping/storage, waste management, experiments, tests, chemical, radiological, and biological analyses, environmental remediation, and data analysis (e.g., software). All calculations, designs, etc., become the property of the Site ERPD.

6.5 Instructions, Procedures, and Drawings

All work shall be performed to the Site ERPD approved and controlled procedures except where excluded in writing by the Site. Any procedures prepared shall be done in accordance with guidelines specified by the CTR and submitted in hardcopy and electronic media.

During the preparation of the draft work plan, the Subcontractor shall prepare a Quality Assurance Addendum that shall be submitted as part of the final work plan.

Data quality objectives (DQOs) must be established before fielding of a project, within a suitable work-controlling document (such as a work plan). Accomplishment of data quality objectives must be addressed in the final report. Development and DQOs must follow Environmental Protection Agency (EPA) Guidance as defined in EPA QA/G-4 and EPA QA/G-9.

Documentation describing the process, and products resulting from the process (e.g., data and technical reports) must be established well enough for process reproduction (by independent peers). Peer reviews, as evidenced by the reviewer's authentication, shall be implemented by the Subcontractor on all quality records before submittal to the CTR to ensure adequate quality of the deliverables based on the scope of work. Deliverables shall not be considered acceptable without written approval by an appropriate Site, Environmental Restoration representative.

6.6 Document Control

The Subcontractor shall acknowledge receipt of and maintain Site plans and procedures in accordance with ERPD procedure number 3-1100-ER-ADM-06.01, Document Control.

6.7 Control of Purchased Items and Services

Items or services procured under this subcontract shall be performed in accordance with the requirements of the QAPjP.

6.8 Identification and Control of Items

When applicable, the Subcontractor shall prepare written procedures that ensure that only correct and accepted items are used or installed and that they are traceable through unique identifiers. The procedures shall be submitted to the Site to ensure approval.

6.9 Inspection

Quality affecting activities are subject to inspection by the Site in accordance with this subcontract.

6.10 Control of Measuring and Test Equipment

Activities in which personnel use measuring and test equipment shall be controlled in accordance with ERPD procedure number 3-21000-ADM-12.01, Control of Measuring and Test Equipment. Such devices shall be controlled, calibrated, and adjusted at predetermined intervals (established by the Subcontractor and approved by the Contractor) to maintain accuracy.

6.11 Mapping Standards

The activities related to the creation of maps shall follow the guidelines as identified in 2-N93-ER-ADM-06.04, Map Control Procedure.

6.12 Handling, Storage, and Shipping

Activities in which personnel handle, store, package, ship, or receive items which if damaged, lost, or deteriorated would be detrimental to the work performed by the Subcontractor or those activities in which personnel handle, store, package, or ship hazardous material shall be controlled by written procedures. The procedures shall be submitted to the CTR for approval.

6.13 Control of Nonconforming Items

Activities regarding the identification and disposition of nonconforming items shall be performed in accordance with ERPD procedure number 3-21000-ADM-15.01, Control of Nonconforming Items and Activities. The control of nonconforming items shall apply to all activities that involve the handling of items, including samples, data, raw materials, hardware, and software.

6.14 Software Quality Assurance

Development of software that:

- 1) controls major physical or programmatic systems with respect to quality control or health and safety, and
- 2) is financed through this SOW shall be controlled in accordance with 2-G24-ER-ADM-19.01, "ER Program Division Software Management Plan."

6.15 Accessibility and Records

The Subcontractor's work place and working records shall be accessible during normal working hours for verification or audit by the Contractor or their representatives, during the performance of this contract. All records shall be handled in accordance with 2-G18-ER-ADM-17.01, Records Capture and Transmittal. Each quality record generated shall become the property of the Site and shall be turned over to the Site records center within 30 days of completion of the record except where excluded in writing by the Site Environmental Documentation Manager.

6.16 Records Turnover

All ERPD project documents, correspondence and electronic deliverables that have been executed, completed, approved and which furnish evidence of the quality and completeness of data (including raw data) and of activities affecting quality shall be considered Quality Records and are the property of the US DOE, the Site. Quality Records include but are not limited to the following:

- As-Built drawings
- Chain-of-Custody forms
- Data summary reports
- Data validation

- Field and laboratory calibration records
- Field records
- Logbooks
- Survey reports
- Work plans
- Forms completed from Standard Operating Procedures
- Training and qualification records
- Health and Safety Plans
- Permit compliance reports
- Drawings
- Concurrence reports
- Maps
- Photographs
- Electronic Medias
- Quality Assurance Addenda

The above stated listing (as a minimum) shall be treated as Quality Records and protected in 1 hour fire rated or equivalent cabinets while in-process. Within 30 days of completion, two copies of all Quality Records will be delivered to the CTR for authentication. The CTR will then submit to the ERPD Project File Center in accordance with 2-G18-ER-ADM-17.01, Records Capture and Transmittal, DOE Order 5700.6C Quality Assurance and RFETS Plant Policy 2-17 Records Management Program.

7.0 SECURITY REQUIREMENTS

None.

ADDENDUM 1

1.0 OBJECTIVE

The objective of this addendum is to define the scope of work (SOW) to design and implement a passive leachate collection and treatment system.

2.0 SCOPE

The scope of this addendum is to implement revised scope for Operable Unit 7 (OU 7), Present Landfill for the Leachate Collection Action Memorandum.

3.0 APPLICABLE DOCUMENT GUIDANCE

Same documents as listed in Statement of Work.

4.0 TASKS

4.6.12 Modified Leachate Accelerated Action

The subcontractor shall be required to prepare a conceptual design in support of the Accelerated Action. The conceptual design shall be sufficient for supporting the Title II Design. The design must be gravity collection and passive flow through treatment.

The subcontractor shall be required to develop Title II Design. The Title II design must include E-size drawings, technical specifications and construction quality assurance plan. The Title II Design Document shall be prepared by a registered engineer. Draft and final versions will be required. A comment resolution/review meeting for the Title II design will be required.

Procure/fabricate a reactor to reduce contaminant loading to or below the potential Applicable or Relevant and Appropriate (ARARs) levels. The reactor must be compatible with the gravity collection system.

5.0 DELIVERABLES

Provide a plan view, cross section view and text summary of the passive collection and treatment system by June 15, 1995.

Provide Title II design with technical specifications and construction quality assurance plan by July 7, 1995.

Procure/fabricate a reactor to reduce contaminant loading to or below potential Applicable or

Relevant and Appropriate (ARARs) levels prior to start of construction.

6.0 QUALITY ASSURANCE REQUIREMENTS

Same as listed in Statement of Work.

7.0 SECURITY REQUIREMENTS

Same as listed in Statement of Work.

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